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FIG. 1

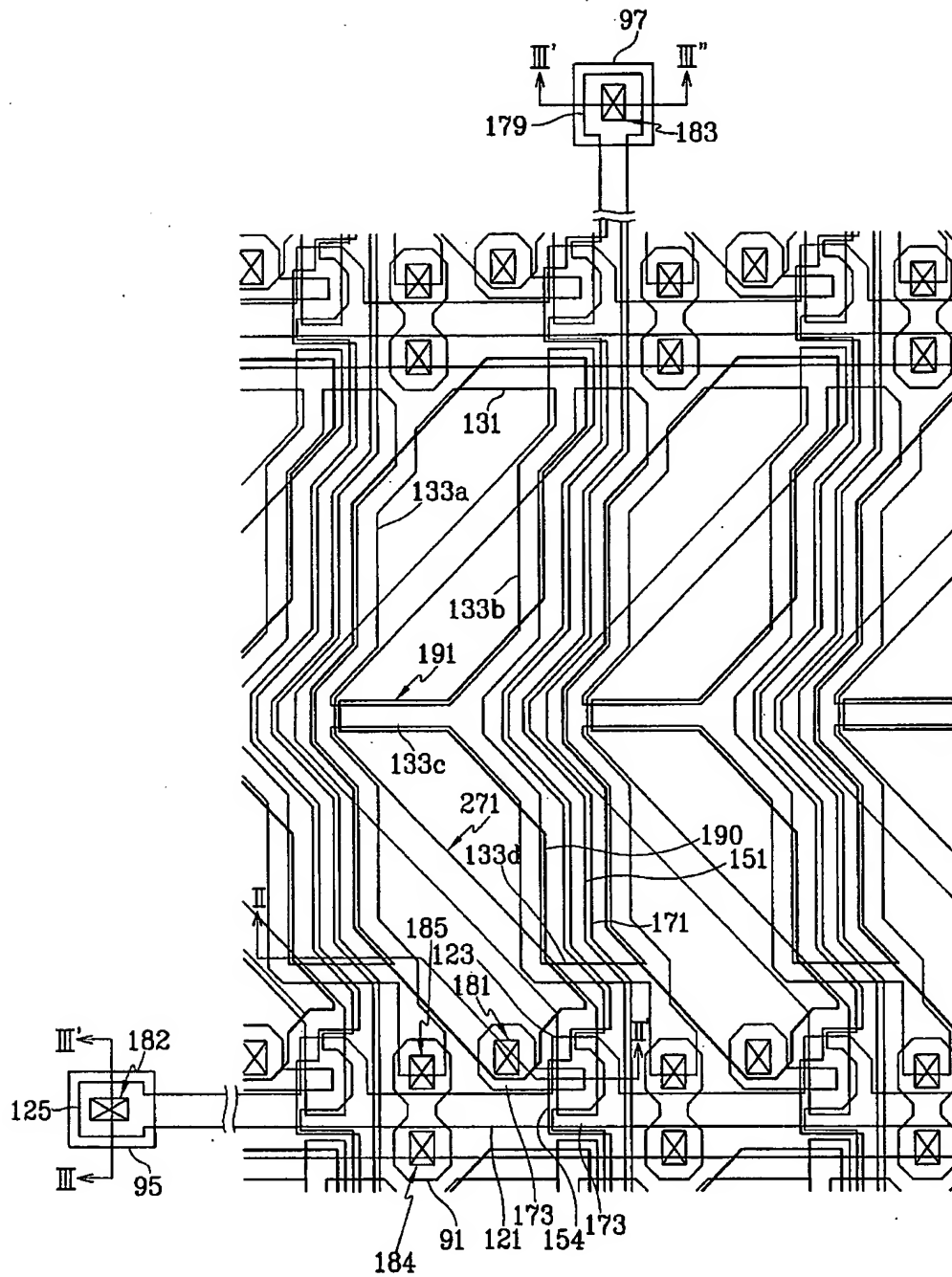


FIG.2

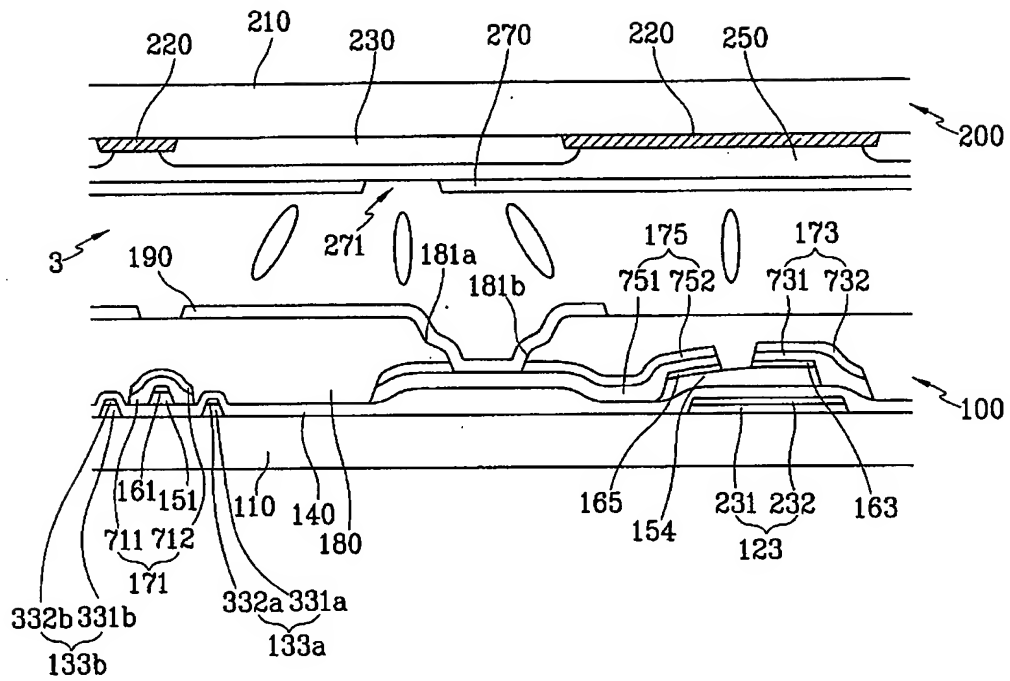


FIG.3

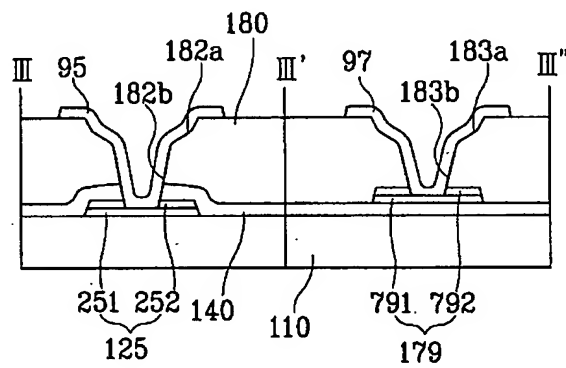


FIG.4A

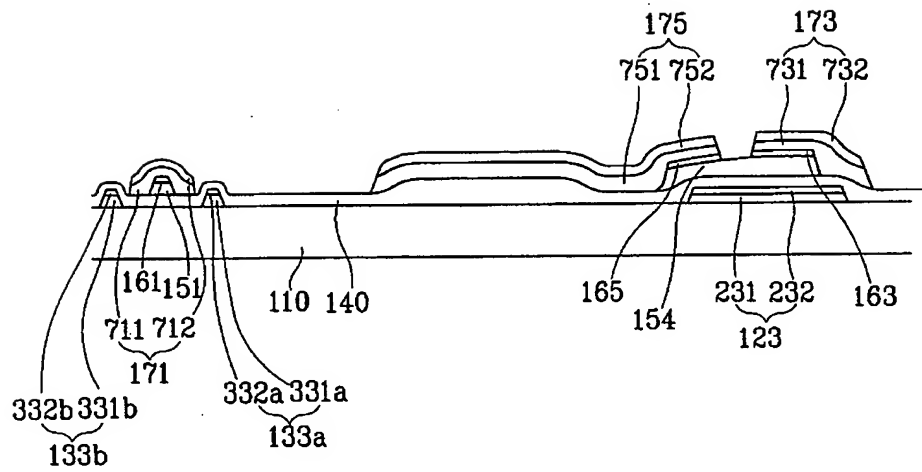


FIG.4B

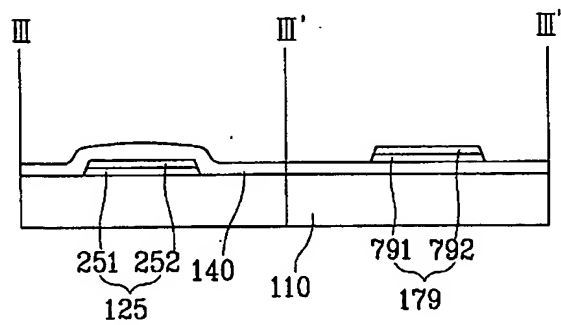


FIG.5A

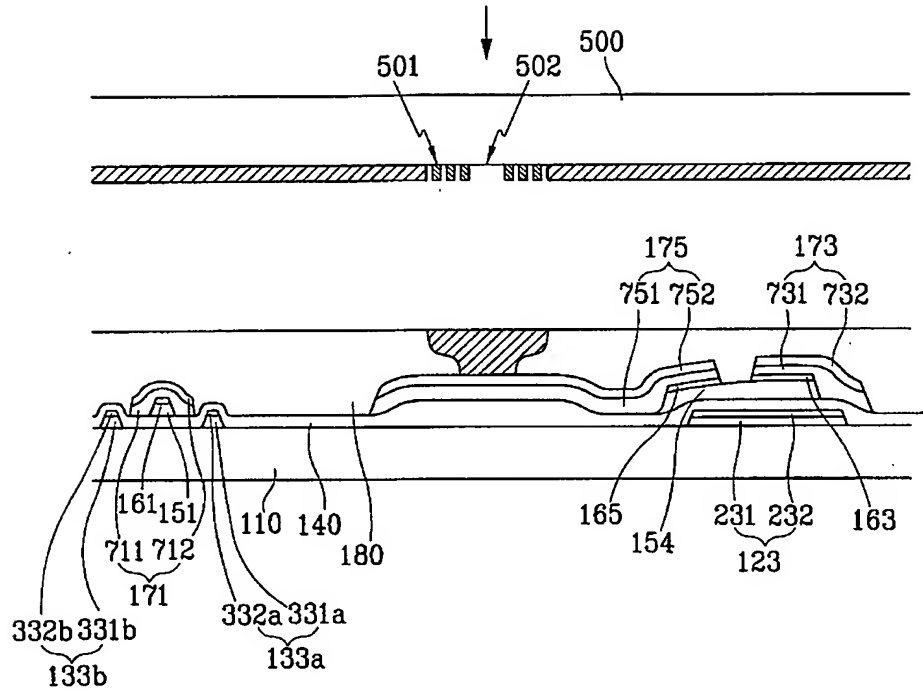
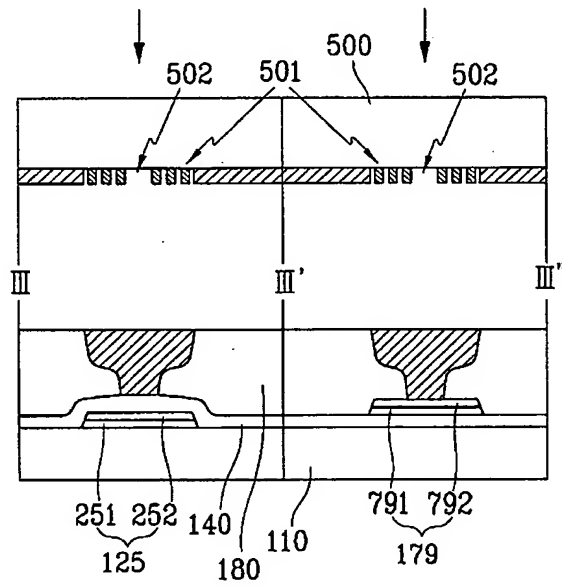


FIG.5B



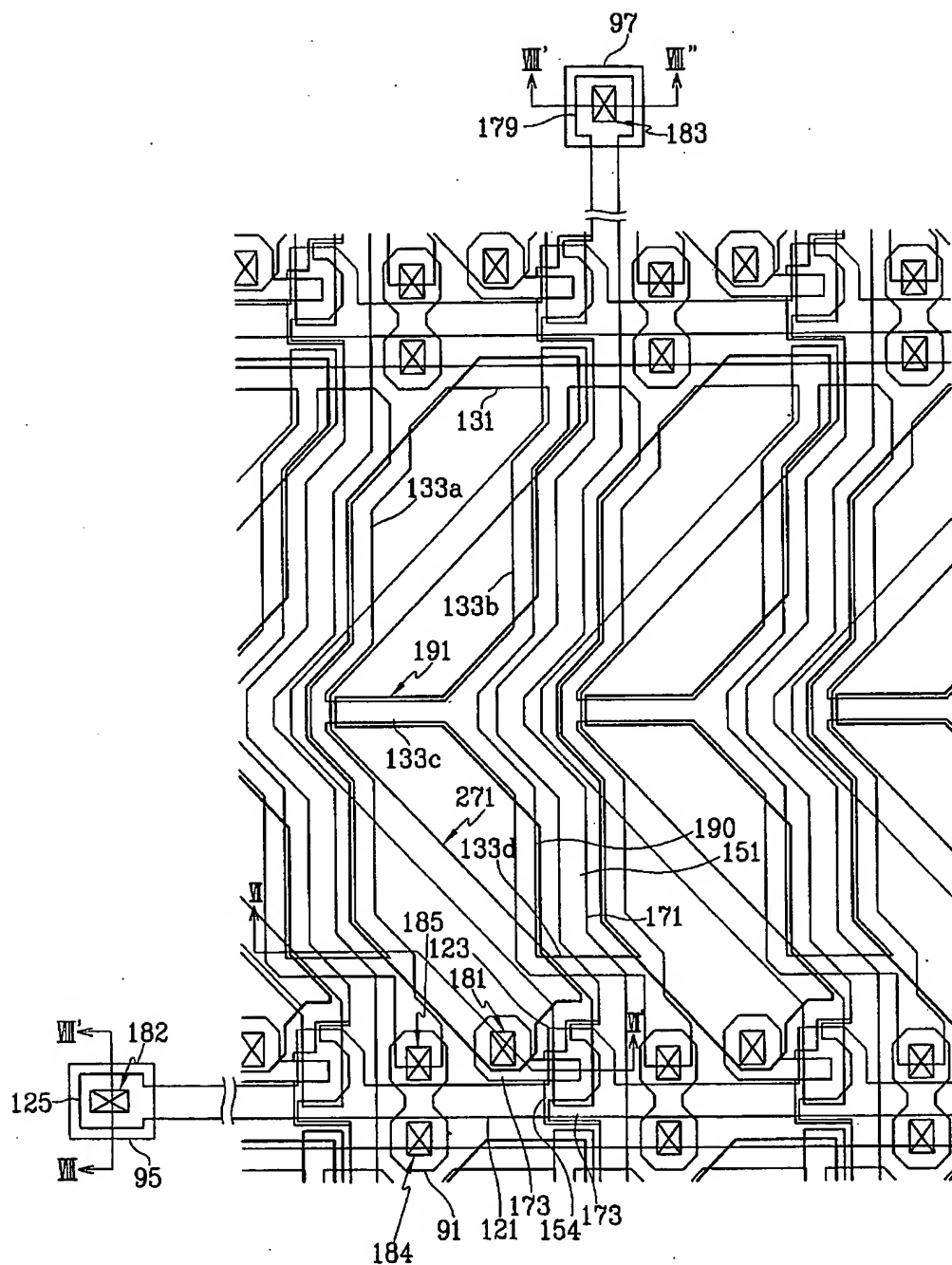


FIG.7

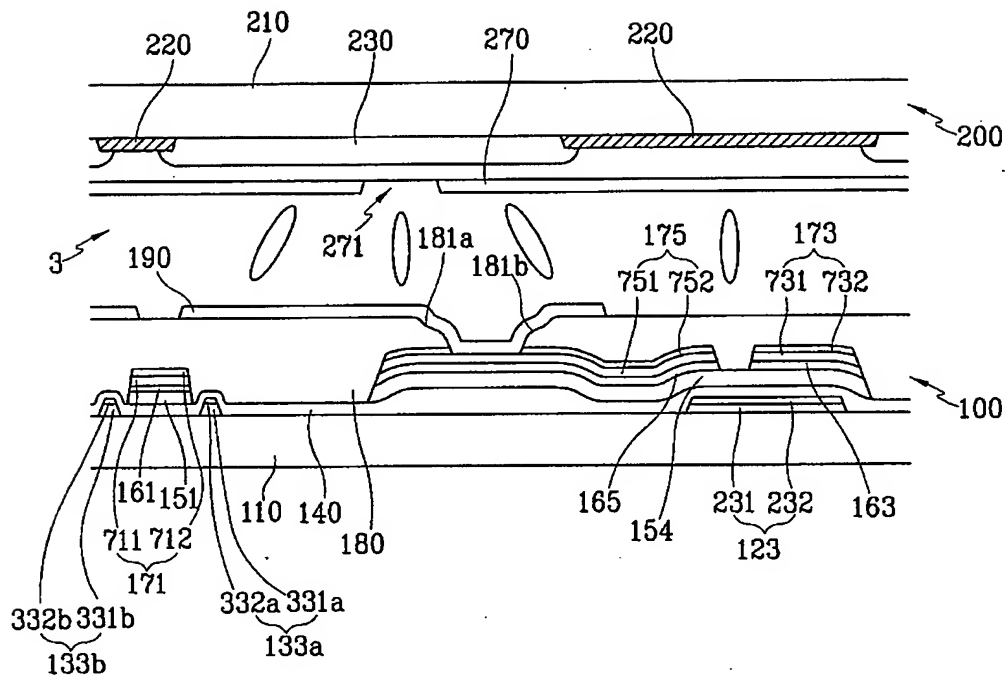


FIG.8

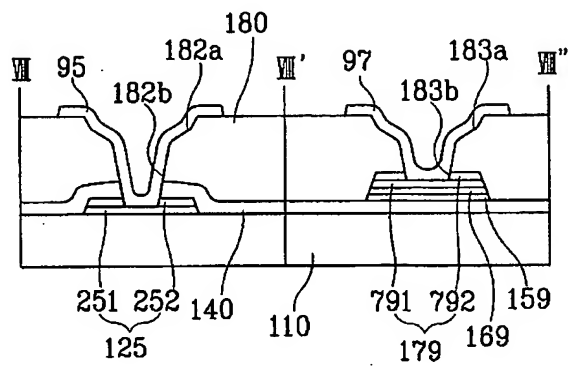


FIG.9A

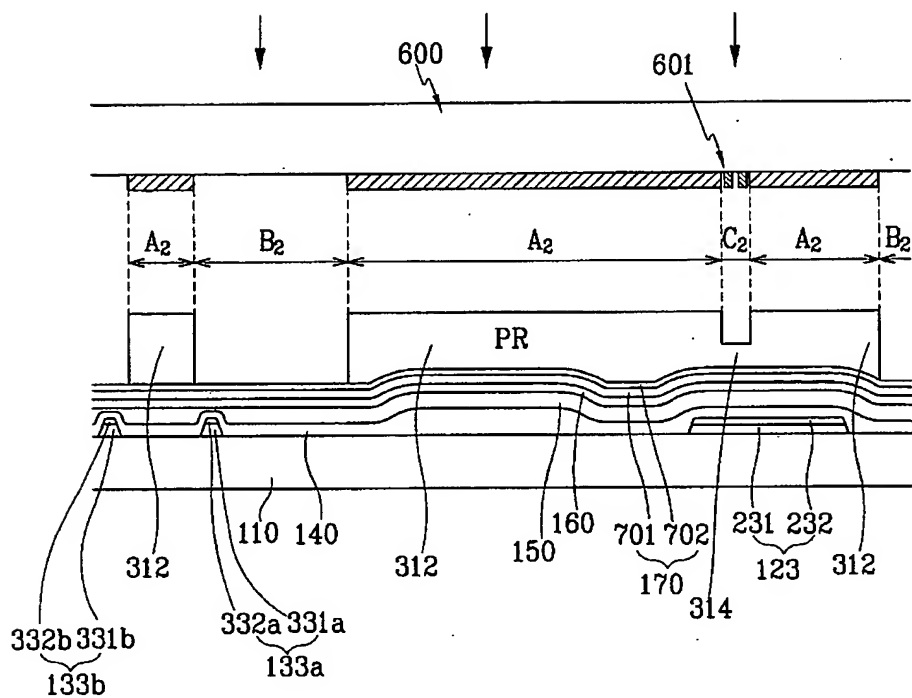


FIG.9B

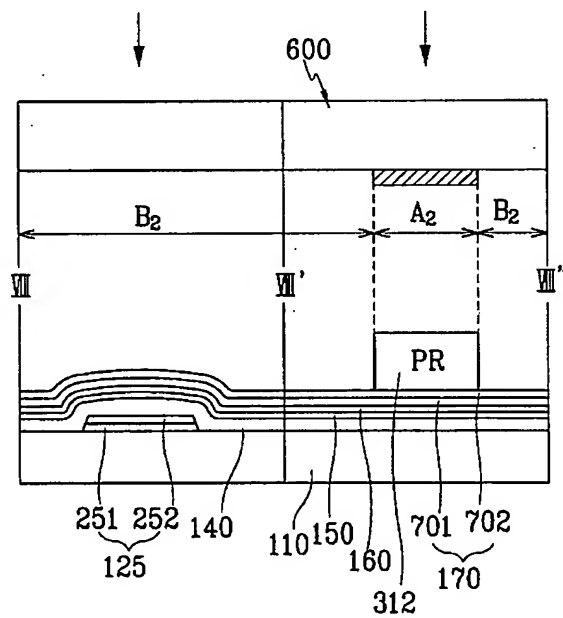


FIG.10A

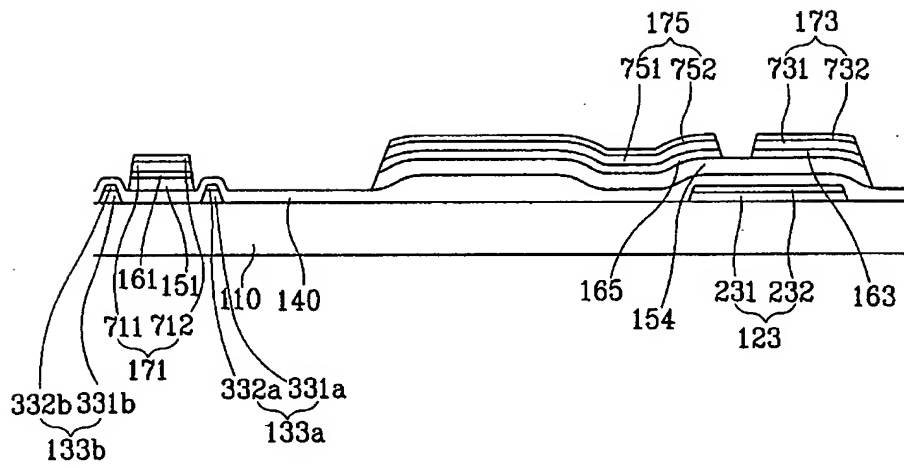


FIG.10B

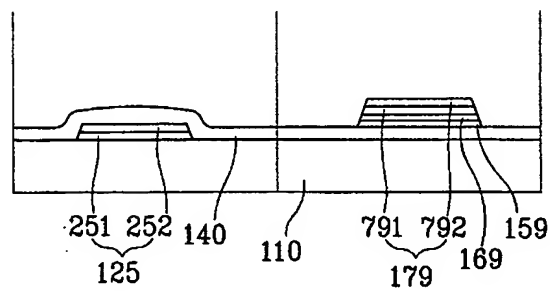


FIG.11A

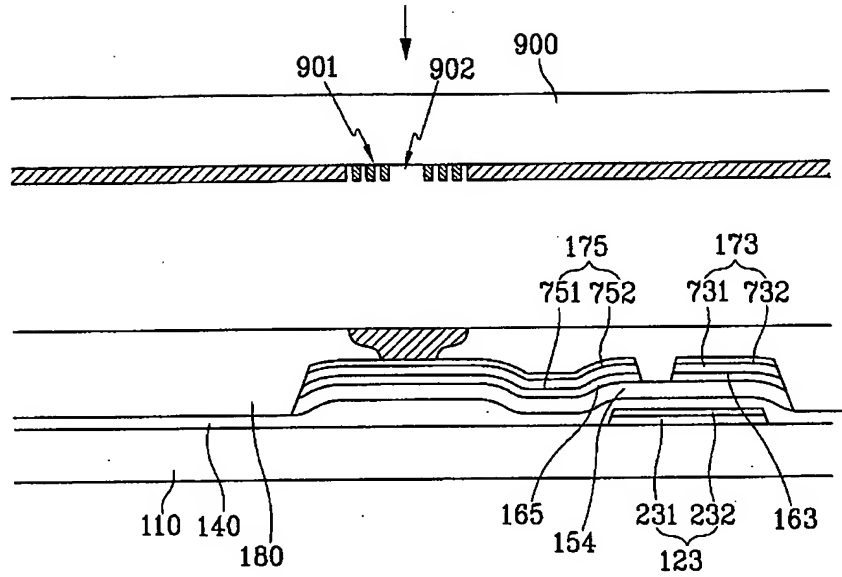


FIG.11B

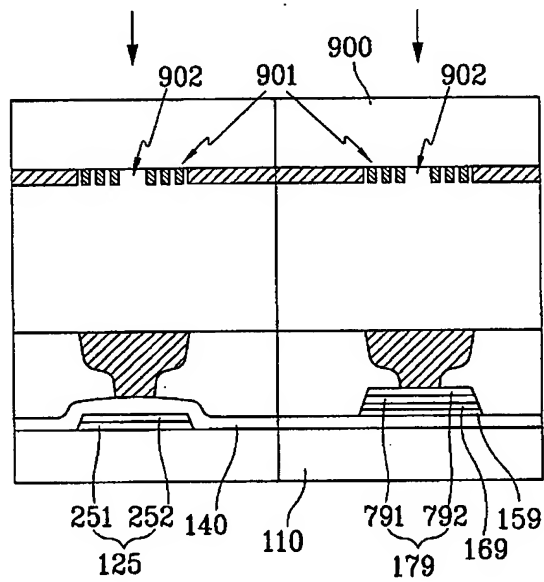


FIG.12

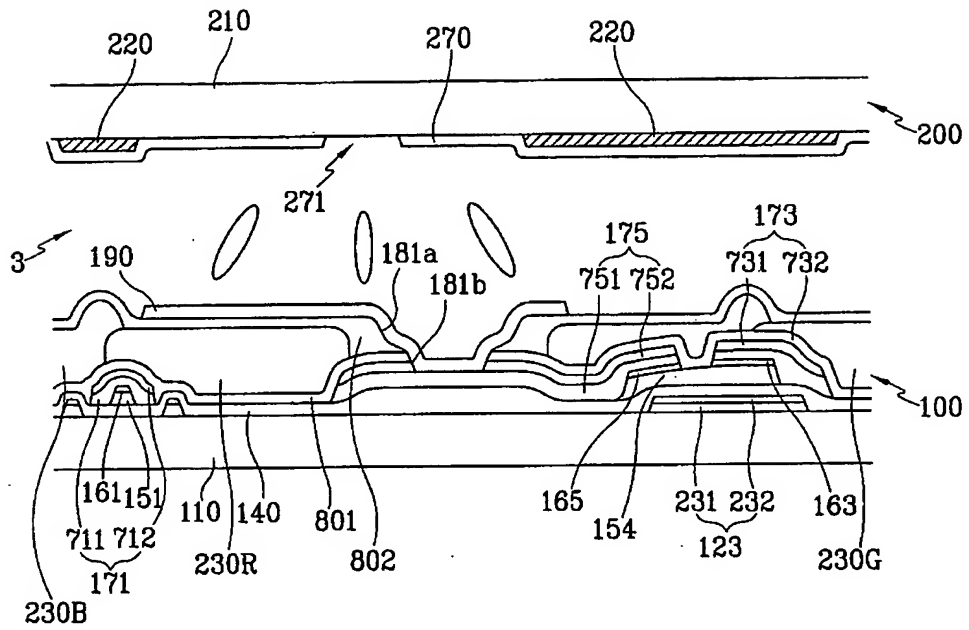


FIG.13

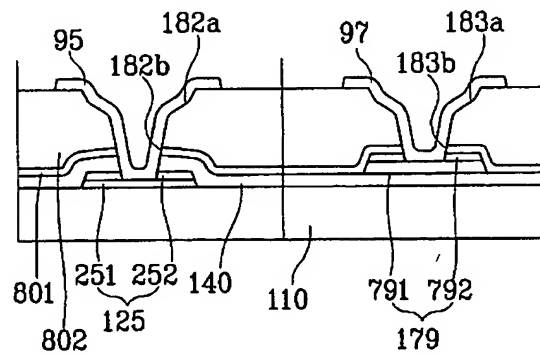


FIG.14

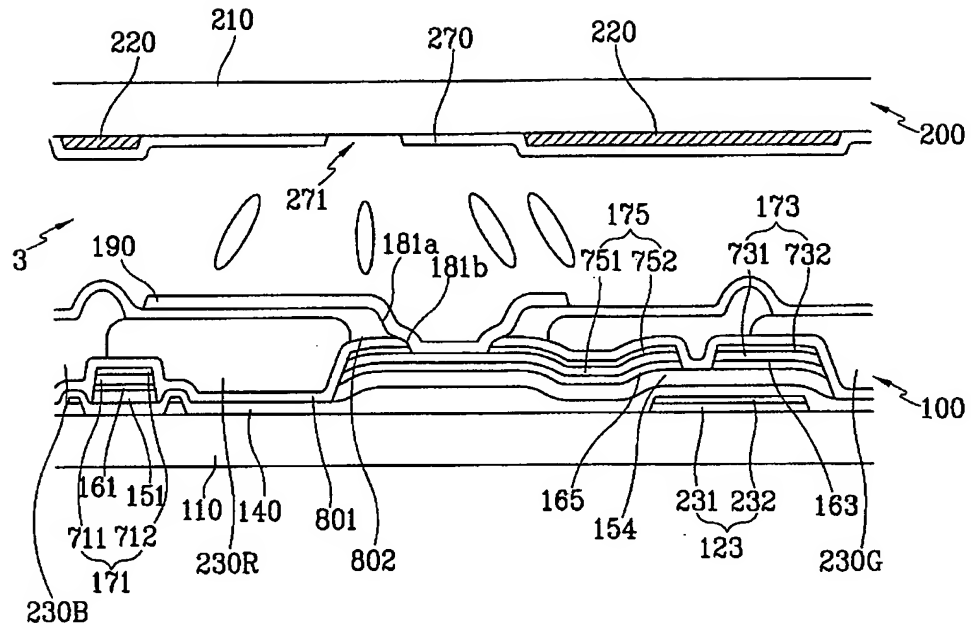
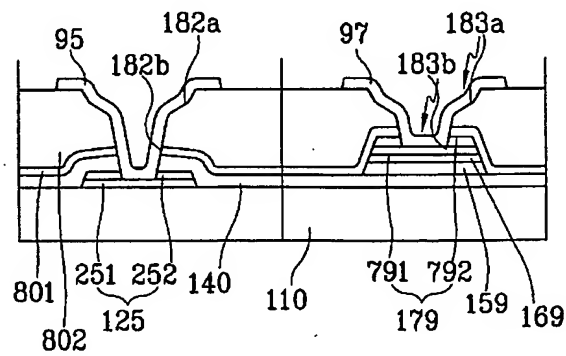


FIG.15



A detailed cross-sectional view of a semiconductor device 100. The device consists of several stacked layers. At the top is a thin layer 210, followed by a thicker layer 220 which contains two rectangular openings or recesses labeled 270. Below these is another thin layer 271. The main body of the device includes a series of raised regions or gates. On the left, a gate stack is labeled 190, with its base being layer 161 and its side walls 151. To its right are two more gate structures, each with a central opening. The first has a top surface 181a and side walls 181b. The second has a top surface 175 and side walls 751 and 752. Further right is another gate structure with a top surface 173 and side walls 731 and 732. These gates are separated by a common layer 110. Beneath the gates are various other layers and features: layer 140 is below the first gate; layer 165 is below the second gate; layer 154 is below the third gate; and layer 163 is at the bottom right. Other labels include 230R, 180, 230B, 231, 232, 123, and 230G, indicating different regions or materials within the device structure.

FIG.18

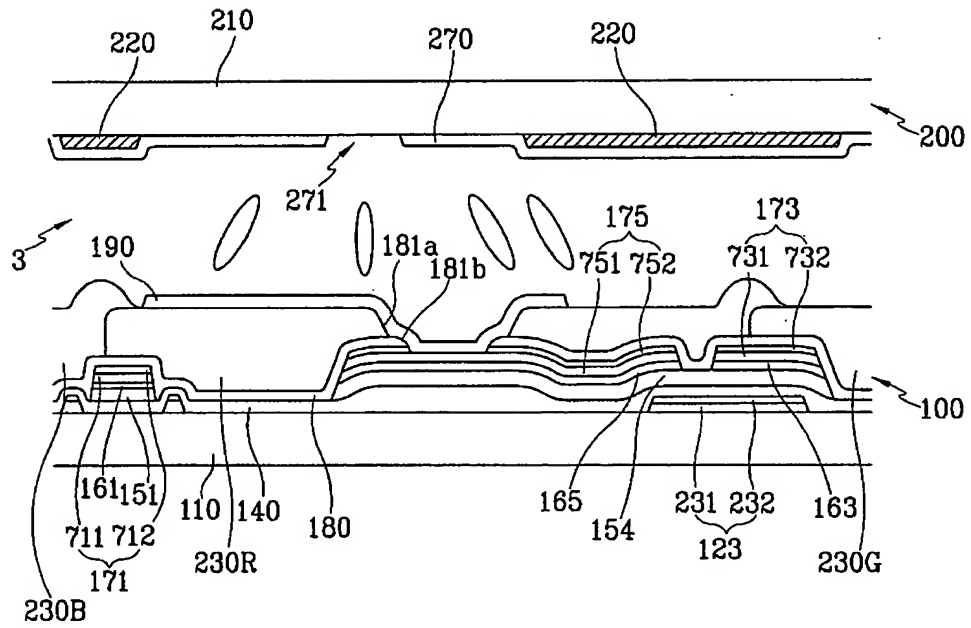


FIG.19

